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## **REMARKS**

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Claims 1-6, 15 and 16 are pending. Claims 1-6 are rejected. Claim 1 and the specification were amended. New claims 15 and 16 were added. No new matter is presented by the new claims or amendment. For example, support for new claim 16 appears on pages 2 and 5 of the Application.

All amendments not clearly made in direct response to the specific, elaborated sub-points of the indefiniteness rejection, which are expressly stated in the Office Action, were made for purely stylistic and editorial reasons and not for a reason related to patentability.

### I. Rejections Under 35 U.S.C. § 112, 2<sup>nd</sup> Para.

Claim 1 is rejected as indefinite. Applicant submits that the amendments to claim 1 resolve any indefiniteness problems.

New claim 15 and 16 reflect features that were removed from claim 1. However, rather than reciting "at high speed," claim 16 defines the coating speed in terms of the required speed of migration of adhesion-promoting molecules in the plastic strip. Since high coating speed requires high migration speed, one should infer from claim 16's recitation of high migration speed (about one second) that the coating speed in the method of claim 16 must be high.

## II. Rejections Under 35 U.S.C. § 103

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as obvious over Aoki et al (U.S. 4,007,078) and Ichikawa et al (U.S. 4,994,130). Claims 2 and 4-6 are rejected under 35 U.S.C. 103(a) as obvious over Aoki et al (U.S. 4,007,078) and Ichikawa et al (U.S. 4,994,130) and further in view of Smith et al (U.S. 5,407,702).

Applicant respectfully submits that Aoki, Ichikawa and Smith (and the combination thereof) fail to suggest several features of the claimed invention and, in any event, cannot be properly combined.

### A. Aoki et al.

Aoki discloses a method for continuously supplying a plastic film strip with uniform thickness and breadth to machines such as printing, packaging and bag-making machines. Aoki differs from the claimed invention in numerous ways:

- (1) Aoki is not directed to coating metal substrates (see Application, preamble of amended claim 1).
- (2) Aoki does not first lead the plastic strip around a cooling roll (Application, amended claim 1, para. ii), but instead through a water reservoir (Aoki, col. 3, lines 2-5).
- (3) Aoki does not disclose “heating the substrate to a temperature at or above the softening temperature” (Application, amended claim 1, para. iv). Aoki states that the heat sealer 15 presses down on the two overlapped strips – film strip B<sup>I</sup> and coupling film strip B<sup>II</sup> (Aoki, col. 5, lines 20-27). Strip B<sup>I</sup> is over strip B<sup>II</sup> and is directly contacted by heat sealer 15. Thus, strip B<sup>I</sup> is heated, not the “substrate.”

(4) Aoki does not disclose “pressing the plastic strip onto the substrate by closing the contact roll” (Application, amended claim 1, para. v). Instead, Aoki discloses sealing the

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plastic strip to another plastic strip with a heat sealing device (Aoki, col. 5, lines 19-29).

(5) Aoki appears not to disclose that “the substrate and the cooling roll are connected by the plastic strip” (Application, amended claim 1, para. v).

(6) Aoki does not disclose detecting the characteristics of the plastic strip “as it travels between cooling roll and contact roll” (Application, amended claim 1, last paragraph).

Rather, the detector in Aoki monitors the plastic strip before it enters the water reservoir, i.e., before it undergoes cooling (Aoki, Fig.1; col. 4, lines 39-46).

(7) Aoki appears not to disclose “leading away the plastic strip between an opened contact roll and the substrate” (Application, amended claim 1, para. iii).

(8) Aoki appears not to disclose “bringing the plastic strip and the substrate up to speed” (Application, amended claim 1, para. iv).

#### B. Ichikawa et al

Ichikawa discloses a method for coating a plastic resin with aluminum. Ichikawa differs from the claimed invention in several ways:

(1) In Ichikawa, the plastic 10,11 is the substrate and the coating is the metal 12. In the claimed invention, the metal is the substrate and the plastic is the coating.

(2) In Ichikawa, the substrate 10,11 is extruded, not the coating 12. Like the metal substrate in the claimed invention, the aluminum coating is pre-made.

(3) Ichikawa discloses no detector to monitor characteristics of the extruded plastic.

### C. Improper Combination

Aoki and Ichikawa cannot be properly combined with each other. For example, Ichikawa requires pre-heating its aluminum coating layers. In contrast, Aoki cannot pre-heat its coating layer.

### D. Smith et al

Smith et al fails to make up for the deficiencies of Aoki and Ichikawa. In addition, it cannot be properly combined with Aoki or Ichikawa. Smith discloses coating polyester layers directly from an extruder 110,124 onto an aluminum sheet 100 (Smith, col.5). It is improper to combine Smith with Aoki because Aoki requires pre-cooling of its film layer B<sup>1</sup>. It is improper to combine Smith with Ichikawa because Smith applies two layers of polyester to an aluminum sheet whereas Ichikawa applies two layers of aluminum to a polymer sheet.

## III. Conclusion

In view of the above, it is respectfully submitted that all objections and rejections are overcome. Hence, a Notice of Allowance is respectfully requested.

Applicant hereby petitions for any extension of time under 37 CFR § 1.136 that may be required to maintain the pendency of this case, and requests that any fee under 37 CFR § 1.17 associated with such extension be charged to Deposit Account No. 19-4375.

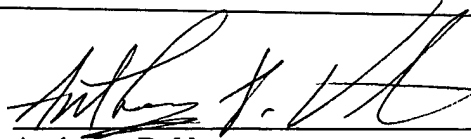
In the event that the Examiner believes that it may facilitate the advancement of this application, he is invited to contact the undersigned attorney at the local Washington, D.C.,

telephone number indicated below.

Respectfully submitted,

Date: March 12, 2001

By:



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MARKED-UP COPY OF AMENDED CLAIM 1

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1. (Amended) Method for strip-coating a metallic strip-shaped substrate with a strip of plastic comprising the successive stages :

- (i) in-situ casting of a plastic strip;
  - (ii) leading the plastic strip around a [preferably internally water-cooled] cooling roll;
  - (iii) leading away the plastic strip between an opened contact roll and the substrate until the plastic strip production is underway and stabilised;
  - (iv) bringing the plastic strip and the substrate up to speed and heating the substrate to a temperature [of the substrate close to] at or above the softening temperature of the part of the plastic strip facing the substrate;
  - (v) pressing the plastic strip onto the substrate by closing the contact roll and where applicable breaking off the plastic strip and stopping it being led away, while the substrate and the cooling roll are connected by the plastic strip;
  - (vi) coating the substrate with the plastic strip [at high speed];
- while performing on the plastic strip as it travels between cooling roll and contact roll at least one of monitoring its thickness, monitoring its colour, monitoring strip tension and trimming its width.